Nos. 14-46, 14-47, 14-49

IN THE

Supreme Court of the United States

MICHIGAN, ET AL., *Petitioners*,

v.

ENVIRONMENTAL PROTECTION AGENCY, ET AL., *Respondents*.

UTILITY AIR REGULATORY GROUP, *Petitioner*,

v.

ENVIRONMENTAL PROTECTION AGENCY, ET AL., *Respondents*.

NATIONAL MINING ASSOCIATION, *Petitioner*,

v.

ENVIRONMENTAL PROTECTION AGENCY, ET AL., *Respondents*.

On Writs Of Certiorari To The
United States Court Of Appeals
For The District of Columbia Circuit

BRIEF OF INDUSTRY RESPONDENTS CALPINE CORPORATION, EXELON CORPORATION, NATIONAL GRID GENERATION LLC, AND PUBLIC SERVICE ENTERPRISE GROUP, INC.

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RULE 29.6 DISCLOSURE STATEMENT

Respondents Calpine Corporation, Exelon Corporation and Public Service Enterprise Group, Inc., are publicly traded corporations and have no parent companies. No publicly-held company owns 10% or more of their stock. Respondent National Grid Generation LLC is a wholly-owned subsidiary of KeySpan Corporation. KeySpan Corporation is a wholly-owned subsidiary of National Grid USA. National Grid USA is wholly-owned by National Grid North America Inc., which is wholly-owned by National Grid (US) Partner 1 Limited. National Grid (US) Partner 1 Limited is wholly-owned by National Grid (US) Investments 4 Limited, which is wholly-owned by National Grid (US) Holdings Limited, which is wholly-owned by National Grid plc. National Grid plc is a publicly traded company that has no parent companies, and no publicly-held company holds 10% or more of its shares.

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Industry Respondents are engaged in the electric generation business. Together they represent 80 gigawatts of generation capacity, enough to power 60 million homes, using coal, oil, gas, nuclear, wind, solar, and other energy sources. Industry Respondents' experience gives them significant insight into the practical operation of the Clean Air Act's regulatory scheme and its consequences for competitive electricity markets.

The Mercury and Air Toxics Standards ("the Rule") imposed by EPA are economically practicable and have already been achieved by a large portion of the power sector. Industry Respondents, along with many other market participants, have invested billions in installing emissions controls and developing state-of-the-art, highly efficient, low- or zero-emissions electric generation units. Yet, until the Rule takes effect, such plants will continue to be competitively disadvantaged relative to old, high-emitting facilities that do not bear the cost of controlling emissions of hazardous air pollutants, thereby discouraging further investments to modernize the Nation's generation fleet.

STATEMENT

A. Regulation of Hazardous Air Pollutants From Power Plants.

Large power plants are by far the largest source of mercury and certain other hazardous air pollutants. 77 Fed. Reg. 9304, 9310 (Feb. 16, 2012) ("Final Rule"). Yet until the Rule takes effect on April 15, 2015—nearly 25 years after Section 112 was adopted in its

current form—there will be *no* federal requirement that power plants limit the hazardous air pollutants they emit. By contrast, EPA has imposed stringent regulation on source categories emitting far smaller amounts of such pollutants, including industrial boilers that are technologically similar to power plants, but are smaller or sell less of their output to a utility distribution system.[1] The Rule changes that, by requiring all coal- and oil-fired power plants to match the emissions limitations already achieved in practice by their best-performing competitors.

1. Section 112's Regulatory Scheme.

Congress amended Section 112 in 1990 in response to EPA's failure to aggressively regulate hazardous air pollutants. Michigan Pet. App. 8a-9a ("Pet. App."). Congress had previously permitted EPA to "list" pollutants for regulation, but in two decades, EPA had listed only seven. S. Rep. No. 101-228, at 128 (1989), *reprinted in* 1990 U.S.C.C.A.N. 3385, 3513.

In 1990, Congress itself designated 189 pollutants for which it required EPA to develop emission standards on an expedited schedule. 42 U.S.C. §7412(b); *see* Pet. App. 9a-10a. Congress gave EPA one year to "list" categories of sources that emit those

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[1] *See* 42 U.S.C. §7412(a)(8) (defining "electric utility steam generating unit"); 40 C.F.R. Part 63, Subpt. DDDDD (national emission standards for hazardous air pollutants from industrial, commercial, and institutional boilers and process heaters).

pollutants above certain quantities. §7412(c)(1). EPA was then required to regulate those sources. §7412(d).

Congress did not permit EPA to consider cost in its initial listing analysis. §7412(c)(1). Similarly, once a source category is listed, Congress permitted EPA to "delist" it only if EPA determines that "no source in the category" emits hazardous pollutants at levels that threaten public health; cost is irrelevant. §7412(c)(9)(B); *New Jersey v. EPA*, 517 F.3d 574, 581-82 (D.C. Cir. 2008).

EPA must set emission standards for source categories it has listed. §7412(d), (e)(1). At that stage, Congress assured that cost would be given due weight. It directed EPA to establish emission standards that assure the "maximum degree of reduction" that EPA "determines is achievable," "taking into consideration the cost" of such regulation, as well as other factors. §7412(d)(2). Congress further mandated that the minimum standards for each source category "shall not be less stringent than ... the average emission limitation achieved by the best performing 12 percent of the existing sources." *Id.* §7412(d)(3); *see also* Pet. App. 9a-10a. These minimum "Floor Standards" implicitly reflect cost considerations. Because they are based on what the "best performing" sources in the same category are *already achieving*, they necessarily have proven to be economically practicable for those operators. *See* Pet. App. 29a.

Congress required an additional threshold step before the largest power plants would be regulated

under Section 112. When it amended the statute, Congress was unsure whether other programs applicable to power plants would have the ancillary benefit of substantially reducing their emissions of hazardous air pollutants. Specifically, to comply with the Title IV Acid Rain Program ("Title IV"), which targeted sulfur dioxide ("SO_2") and nitrogen oxides ("NO_x") emissions from the largest coal-fired plants, those plants could have adopted controls that would also reduce emissions of hazardous air pollutants. *See* Clean Air Act Amendments, Pub. L. No. 101-549, 104 Stat. 2399 (1990).

Thus, Congress required EPA to conduct, within three years, a study ("the Utility Study") "of the hazards to public health reasonably anticipated to occur as a result of emissions by electric utility steam generating units of [hazardous air pollutants] after imposition of the requirements of this chapter." §7412(n)(1)(A). EPA also was to consider "alternative control strategies for emissions which may warrant regulation under this section." *Id.*[2] Congress directed EPA to regulate power plants under Section 112 if it determined that "such regulation is appropriate and necessary after considering the results of the study." *Id.*

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[2] Congress also directed EPA to perform a study of mercury emissions from power plants and other sources ("the Mercury Study") on a longer, four-year timeframe. 42 U.S.C. §7412(n)(1)(B). In contrast to the Utility Study, the Mercury Study was to consider "the costs" of available control technologies. *Id.*

2. The Utility Study and EPA's Regulatory Response.

EPA submitted the Utility Study to Congress in 1998. The Study determined that strategies implemented by power plants to comply with Title IV would not significantly reduce emissions of hazardous air pollutants.

Unlike Section 112, Title IV does not impose mandatory emission limits on individual power plants. Instead, it uses tradable pollution allowances to give generators an economic incentive to reduce pollution contributing to acid rain. *See* 42 U.S.C. §§7651-7651*o*. The owner of any power plant may choose to buy the allowances necessary to cover its emissions, or it may choose to reduce its emissions through various means and sell surplus allowances to other plants. JA117; EPA, Study of Hazardous Air Pollutant Emissions from Electric Utility Steam Generating Units – Final Report to Congress, Vol. I (Feb. 1998) ("Utility Study") at 1-3 to 1-4.[3] Generators' choices among these compliance options influence their emissions of hazardous air pollutants.

For example, complying by installing scrubbers would also reduce emissions of hazardous air pollutants; however, the Utility Study found that few power plants had or would install scrubbers to comply with Title IV.

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[3] Portions of the Utility Study are reproduced in the Joint Appendix. The entire Utility Study is available at http://www.epa.gov/ttn/atw/combust/utiltox/eurtc1.pdf.

See JA117-19. Instead, the vast majority of plants switched to low-sulfur coal or purchased emission allowances, JA117-18, which had little or no effect on hazardous air pollutant emissions. Utility Study at 13-1, 13-3 to 13-7, 14-6. The Study also reported that existing NO_x and particulate matter controls were not expected to reliably reduce mercury emissions. JA94-95; Utility Study at 13-13 to 13-15, 14-7.

The Utility Study thus concluded that "[u]tilization of add-on controls to comply with the acid rain program [is] not expected to significantly impact [hazardous air pollutant] emissions due to their limited numbers and limited [hazardous air pollutant] control efficiency improvement." JA106-07.

In 2000, after considering the Utility Study, EPA concluded that it was "appropriate and necessary" to regulate emissions from power plants. 65 Fed. Reg. 79,825, 79,827-28 (Dec. 20, 2000) ("2000 Finding"). As EPA explained, such units "are the largest source of mercury emissions in the U.S." *Id.* at 79,827. Because "[m]ercury is highly toxic, persistent, and bioaccumulates in food chains," it poses health risks to humans, and, in particular, to developing fetuses. *Id.* at 79,827-29. EPA also identified other metal and acid gas emissions from power plants—including arsenic, chromium, nickel, cadmium, dioxins, hydrogen chloride, and hydrogen fluoride—that were "of potential concern" because of their health effects. *Id.* at 79,827.

Given the health and environmental risks posed by power plant emissions, and the existence of several

options to control them, EPA determined that it was "appropriate" to regulate coal- and oil-fired plants. 65 Fed. Reg. at 79,830. Such regulation was "necessary" because implementation of the Act's other provisions would "not adequately address" the hazards EPA had identified. *Id.*[4]

In 2005, the agency reversed itself, removing coal- and oil-fired power plants from the list of source categories. 70 Fed. Reg. 15,994, 15,994 (Mar. 29, 2005) ("2005 Revision"). The D.C. Circuit held that decision unlawful because EPA had failed to find that "'no source in the category'" emitted pollutants at levels that threatened public health. *New Jersey*, 517 F.3d at 582; *see* §7412(c)(9)(B). Nonetheless, EPA waited until 2011 to regulate emissions of hazardous air pollutants by power plants. Meanwhile, large power plants—the largest source of such emissions—faced *no* federal requirement to reduce them.

B. The Economics of Pollution Control in Wholesale Electricity Markets.

The negative impact of EPA's regulatory vacuum has been exacerbated by the economics of wholesale electricity markets. All power plants are connected to the nationwide network of electric transmission lines commonly referred to as the "grid," where electricity is transmitted across multi-state regions to satisfy

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[4] By contrast, EPA declined to regulate natural gas-fired power plants because emissions of hazardous air pollutants from such plants were "negligible." 65 Fed. Reg. at 79,831.

demand. Grid operators must balance the amount of electricity generated with demand in real time, as the grid has no storage capacity and a supply-demand imbalance can overload transmission lines or yield voltage drops that can cause massive blackouts.

In areas served by competitive wholesale electricity markets—which include many of the Nation's most populated areas—grid operators decide which power plants should be allowed to feed electricity into the grid at any given time. Power generators offer electricity for sale at a price that, typically, reflects their marginal production cost. The grid operator dispatches plants in order of their bids, selecting progressively more expensive generation units until supply meets demand.[5]

The price received by each dispatched generator is equal to the bid of the most expensive unit needed to meet demand. This pricing scheme—in which all dispatched generators receive the same price—creates a powerful incentive to reduce operating costs, as generators with low costs can bid less, be dispatched more often, and make greater profits when they run.

Operating pollution controls tends to increase a generator's marginal costs—for example, costs related

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[5] More than 60% of the electricity supplied to the grid is delivered through competitive wholesale electricity markets. *See* ISO/RTO Council, *The Value of Independent Regional Grid Operators* (Nov. 2005), at 9-10, http://www.nyiso.com/public/webdocs/media_room/press_releases/2005/isortowhitepaper_final11112005.pdf. In other areas, cost also dictates dispatch, though generators do not compete to supply power at least cost.

to treatment chemicals, waste disposal, and power and water consumption, in addition to capital costs—and thus increase the amount it must bid to break even. Consequently, "clean" generators may be underbid by similar generators that have not installed or do not operate controls. Moreover, plants without pollution controls receive a windfall from participating in the same market as those with controls: because the market pays all plants the price needed for supply to meet demand, plants without pollution controls receive as profit the higher market price needed to compensate plants operating with them. These dynamics create powerful incentives to avoid investing in or operating pollution controls.

Nonetheless, for several reasons, many coal-fired plants *have* invested in control technology that reduces their emissions of hazardous air pollutants.

First, fourteen states have already adopted limits on mercury emissions, while others have required power plants to install mercury monitoring equipment. *See* JA306-20; State Resps. Br. 35-36.[6] Some states have also regulated additional hazardous air pollutants. JA306-20. Many states that have imposed regulation—including Illinois, New Jersey, and Maryland—are part of the same regional grid as states that have not. Even though plants in the former states suffer a competitive disadvantage relative to "dirtier" plants in other states,

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[6] Indeed, Petitioner Michigan adopted such a requirement, but suspended it after EPA adopted the Rule. *See* Mich. Admin. Code 336.2503 (2009); Mich. Admin. Code 336.2502a (2013); JA314-15.

the "clean" plants have remained in business and continue to compete in the wholesale market.

Second, the applicable federal emission standards for conventional pollutants (such as SO_2, NO_x, and particulate matter) vary based upon a power plant's age. New and modified units must be equipped with state-of-the-art controls, which may also reduce emissions of some hazardous air pollutants. Older units must meet the less stringent emission standards that were in place when they were built. As a result, plants constructed before the Clean Air Act was enacted have few if any modern pollution controls.[7] Nevertheless, despite the additional operating costs new plants incur to meet conventional emission standards, newer units have remained in the market in part because they are more efficient than older ones.

Third, many generation owners have anticipated the Rule and other standards and invested in pollution control technologies to satisfy them. Since 2008, Exelon (including Constellation Energy) spent approximately $1.4 billion to install advanced emission control technologies on coal-fired generation that it owned outright or jointly with others. Other companies likewise have expended significant sums. For example, between 2001 and 2011, Duke Energy spent $5 billion retrofitting its existing units with emissions controls, with the goal of installing scrubbers on 90 percent of its coal generation fleet. PPL Generation reported in 2011

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[7] In 2007-2008, 59% of the Nation's coal-fired units, and 34% of the coal-generation capacity, was over 40 years old. JA579-80.

that 96 percent of its competitive coal generation is scrubbed. JA649-50.

Nevertheless, the economic logic of the wholesale electricity markets discourages the oldest and least efficient plants from investing in and operating pollution controls unless they are required to do so, and, all else equal, makes pollution more profitable than pollution control—despite the negative health and environmental effects that pollution imposes on society.

C. The Rule.

In 2011, EPA proposed to reaffirm its 2000 Finding that regulation of power plants was "appropriate and necessary." EPA reevaluated the record and considered new data collected after complete implementation of Title IV. EPA again found that "[u]tilities are by far the largest remaining source of [mercury] in the U.S.," and are the "largest source" of several additional hazardous air pollutants. 76 Fed. Reg. 24,976, 24,999 (May 3, 2011) ("NPRM"). Because those emissions continue "to pose a hazard to public health and to the environment," and because technologies are available to control them, EPA proposed to find that it is "appropriate and necessary" to regulate coal- and oil-fired power plants. *Id.* In the same NPRM, EPA proposed emission standards for these plants. *Id.* at 25,026-28.

Following public comment, EPA adopted the Final Rule. EPA confirmed that it is "appropriate" to regulate power plants under Section 112 because their emissions of hazardous air pollutants cause hazards to

public health and the environment, and pollution controls are available. 77 Fed. Reg. at 9310-11. EPA further concluded that it is "necessary" to regulate power plants because other requirements of the Act had not adequately addressed the problem. *Id.*

EPA did not consider the costs of regulation in making the "appropriate and necessary" determination. 77 Fed. Reg. at 9326-27. EPA observed that the Act does not require consideration of costs at the listing stage. *Id.* In addition, EPA explained that Congress did not require it to consider costs in other listing decisions, and that nothing in Section 112(n)(1)(A) suggests a departure from that approach. *Id.*

Although EPA was not required to consider costs under Section 112(n)(1)(A), Executive Orders 12866 and 13563 required it to conduct a cost-benefit analysis when it established emission standards. EPA did so in both its proposed and final Regulatory Impact Analyses ("RIA"). Those analyses were performed using "methods and assumptions consistent with the state-of-the-science for human health impact assessment, economics and air quality analysis." 77 Fed. Reg. at 9432. The Final RIA determined that the benefits of the Rule would outweigh its costs by a ratio of at least 3:1, and potentially by 9:1. *Id.* at 9306.

D. The Decision Below.

Several groups challenged the Rule in the D.C. Circuit, which upheld it in its entirety.

As relevant here, State, Industry, and Labor Petitioners challenged EPA's interpretation of the "appropriate and necessary" standard, contending that the word "appropriate" required EPA to consider the costs of regulation. Pet. App. 23a-24a. The D.C. Circuit majority disagreed. The court explained that "[o]n its face, § 112(n)(1)(A) neither requires EPA to consider costs nor prohibits EPA from doing so." *Id.* at 25a. The term "appropriate" is "open-ended," "ambiguous," and "inherently context-dependent." *Id.* at 26a (quotation marks omitted).

Moreover, EPA's construction of that ambiguous term was reasonable: in making the "appropriate and necessary" determination, "Congress directed EPA's attention to the conclusions of the study regarding public health hazards from [power plant] emissions." *Id.* In the remainder of Section 112, "Congress mentioned costs explicitly where it intended EPA to consider them." *Id.* Congress's failure to do so in Section 112(n)(1)(A) demonstrated that EPA was not required to consider costs in deciding *whether* to regulate power plant emissions—only in deciding *how stringently* to do so. Indeed, the majority emphasized, Petitioners could not "point to a single case" requiring "EPA to consider costs where the [Clean Air Act] does not expressly so instruct." *Id.* at 27a-28a.

The majority also rejected the dissent's view that Congress would not have "authorized EPA to regulate without *any* consideration of regulatory cost." *Id.* at 28a. That argument rested "on a false premise" because EPA *did* consider costs, both directly and

indirectly, in setting emission standards under Section 112(d). *Id.* at 28a-29a. In setting Floor Standards, EPA required all power plants to meet the emissions reductions already achieved by their best-performing peers, thus "leveling the playing field" by requiring "uncontrolled plants to install and operate technology" that their competitors were already using in an economically viable manner. *Id.* at 32a (quoting Industry Respondents' brief). Finally, the majority pointed out that, contrary to the dissent's doomsday predictions, EPA found that "the benefits of th[e] rule outweigh its costs by between 3 to 1 or 9 to 1." *Id.* at 32a-33a (quoting 77 Fed. Reg. at 9306).

SUMMARY OF ARGUMENT

The D.C. Circuit did not err in upholding the Rule. In Section 112(n)(1)(A), Congress asked EPA to decide whether to proceed with regulation of emissions of hazardous air pollutants by power plants, applying an open-ended "appropriate and necessary" standard. That standard on its face gives EPA discretion to focus on the health and environmental harms of such emissions at this initial stage, and to defer consideration of cost to the later stage when EPA sets specific emission standards supported by a full cost-benefit analysis.

Unable to identify any express statutory language foreclosing EPA's position, Petitioners argue that making an initial decision to regulate without considering cost is so irrational that it falls outside the range of discretion granted by Congress. That

argument fails because EPA simply applied to power plants the identical regulatory approach that Congress *mandated* for every other source of hazardous air pollutants. Impatient with EPA's slow pace of regulation, Congress required in Section 112(c) and 112(d) that EPA establish emission standards for every other significant source of hazardous air pollutants. Congress directed EPA to "list" these sources for regulation without regard to cost. Congress then expressly directed EPA to consider cost later, in setting emission standards.

EPA did not act irrationally in applying Congress's own chosen regulatory structure to power plants. EPA conducted the Utility Study as Congress directed. It concluded that other Clean Air Act programs would not sufficiently reduce power plants' emissions of hazardous air pollutants. And it found that control technologies were available. Thus, EPA decided that regulation was "appropriate and necessary."

That determination was particularly apt given the nature of competitive electricity markets in which generators submit bids to sell their electricity based upon their operating costs. Absent federal regulation, these markets perversely subsidize uncontrolled plants and place cleaner plants at a competitive disadvantage.

EPA's interpretation of the "appropriate and necessary" standard thus deserves *Chevron* deference. Petitioners have not come close to satisfying the heavy burden of showing that EPA acted unreasonably.

The argument for reversal is especially weak because EPA in fact considered costs and benefits as part of the process of promulgating the final emission standards. Using the cost-benefit methodology mandated by law, it concluded that the Rule's benefits would greatly outweigh its costs. Although EPA did not believe these analyses were legally relevant to its initial decision to regulate the emission of hazardous air pollutants by power plants, there is no doubt what the agency would conclude if it had. For these reasons, even if EPA misinterpreted the Act (and it did not), the record provides all the facts and analysis required for affirmance on grounds of harmless error. A pointless remand would only further delay regulation that Congress authorized 25 years ago, and would perpetuate the competitive advantage enjoyed by polluting plants in the wholesale electricity markets.

ARGUMENT

I. EPA Permissibly Chose to Regulate Power Plants in the Same Manner That Congress Mandated for All Other Sources of Hazardous Air Pollutants.

In challenging EPA's interpretation of the statutory phrase "appropriate and necessary," Petitioners face a heavy burden: under *Chevron U.S.A., Inc. v. Natural Resources Defense Council, Inc.*, 467 U.S. 843 (1984), they must demonstrate that the statute unambiguously forecloses EPA's interpretation. Thus, they strain to read the word "appropriate" as clearly requiring EPA to consider costs when deciding whether to regulate,

arguing that Congress could not have intended EPA to make that choice based on public health and other hazards alone.

That argument founders because with respect to all other sources—including industrial boilers technologically similar to large power plants—Congress made the express legislative choice that Petitioners condemn as irrational: it decided to regulate based upon public health and other hazards alone. It directed EPA to consider costs only in setting the level of regulation, structuring that second stage so that minimum standards would be based on the emission levels that the best-performing comparable sources already had achieved and requiring EPA to consider cost expressly before regulating more stringently than these Floor Standards. Nothing in Section 112(n)(1)(A) prohibits EPA from regulating power plants in the same manner.

A. Section 112(n)(1)(A) Does Not Unambiguously Mandate Consideration of Costs.

As Petitioners acknowledge, Michigan Br. 23; National Mining Association ("NMA") Br. 21; Utility Air Regulatory Group ("UARG") Br. 25, in directing EPA to regulate power plant emissions of hazardous air pollutants if "appropriate and necessary," Congress set an open-ended standard.[8] Certainly there is no

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[8] Petitioners contend that the breadth of the word "appropriate" requires EPA to consider all "relevant factors." *E.g.*, Michigan Br. 23. But even assuming that is true, EPA reasonably determined that costs were not "relevant" in making the threshold decision

"express statutory requirement that the Agency consider costs in making the appropriate determination." 77 Fed. Reg. at 9326-27. Thus, because "the statute is silent or ambiguous" as to whether costs must be considered in deciding whether to regulate, this Court will uphold EPA's interpretation so long as it constitutes "a permissible construction of the statute." *Chevron*, 467 U.S. at 843; *see also, e.g.*, *Entergy Corp. v. Riverkeeper, Inc.*, 556 U.S. 208, 218 (2009) (to receive *Chevron* deference, agency interpretation need not be "the only possible interpretation, nor even the interpretation deemed *most* reasonable by the courts").

EPA's construction is reasonable. Congress directed EPA to decide whether to regulate power plants "after considering the results of" the Utility Study. §7412(n)(1)(A). That Study, in turn, focused on hazards to public health remaining after the implementation of other Clean Air Act requirements, as well as availability of alternative control technologies. Congress did not mandate consideration of costs in the Study.

After considering the Study's results, EPA concluded that regulation of coal- and oil-fired plants is "appropriate" because their emissions of hazardous air pollutants "pose hazards to public health" and the environment, and because "effective controls are available to reduce" both mercury and non-mercury

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whether to regulate, given the statutory context—including that Congress itself did not consider costs in listing other sources.

emissions. 77 Fed. Reg. at 9310; *see id.* at 9311. (EPA found that regulation of natural gas-fired units is not "appropriate," because those units' emissions did not pose health or environmental hazards. *See supra* n. 4.) Regulation of coal- and oil-fired units is "necessary," EPA continued, because those "hazards to public health" and the environment "are reasonably anticipated to remain after imposition of the requirements of the [Clean Air Act]." 77 Fed. Reg. at 9311; *see id.* at 9363.

Because nothing in Section 112(n)(1)(A) requires EPA to consider costs, its decision to focus on health and environmental factors, as well as the availability of control technology, is reasonable. *See, e.g., Entergy*, 556 U.S. at 222 ("It is eminently reasonable to conclude that [statutory] silence is meant to convey nothing more than a refusal to tie the agency's hands as to whether cost-benefit analysis should be used, and if so to what degree."); *Am. Textile Mfrs. Institute, Inc. v. Donovan*, 452 U.S. 490, 510 (1981) ("When Congress has intended that an agency engage in cost-benefit analysis, it has clearly indicated such intent on the face of the statute.").

B. Surrounding Provisions Confirm That EPA's Interpretation Is Reasonable.

The provisions neighboring Section 112(n)(1)(A), as well as the structure of Section 112 generally, confirm that the word "appropriate" can reasonably be construed to focus on public health and environmental harms, and not to encompass consideration of costs.

See, e.g., *Robinson v. Shell Oil Co.*, 519 U.S. 337, 341 (1997) ("The plainness or ambiguity of statutory language" accounts for "the specific context in which that language is used, and the broader context of the statute as a whole.").

As the D.C. Circuit explained, "[t]hroughout § 112, Congress mentioned costs explicitly where it intended EPA to consider them." Pet. App. 26a. Congress's failure to address costs in Section 112(n)(1)(A) thus indicates that it did not require EPA to consider them. *E.g.*, *Russello v. United States*, 464 U.S. 16, 23 (1983).

Specifically, EPA may add pollutants or sources to be regulated without regard to cost. *See* §7412(b), (c). Yet the subsections directing EPA to set emission standards for listed source categories *do* expressly require consideration of cost. Those provisions address, *inter alia*, emission standards for new or existing sources (§7412(d)(2)), emission standards and work practice regulations for coke ovens and coke oven batteries (§7412(d)(8)(A)(i), (B)(i)), and emission standards for addressing the remaining environmental risks after implementation of the statutory provisions (§7412(f)(1)(A)). EPA permissibly construed Subsection 112(n)(1)(A)—a listing provision—consistent with that general structure.

Moreover, in stark contrast to Congress's omission of any reference to costs when describing the Utility Study in Section 112(n)(1)(A), the *very next subsection* requires EPA to conduct the Mercury Study "consider[ing]," among other things, "the costs of

[control] technologies." §7412(n)(1)(B). Yet while Congress required EPA to complete the Utility Study "within 3 years after November 15, 1990," the Mercury Study was to be completed "not later than 4 years" from the same date. §7412(n)(1)(A)-(B). Thus, Congress plainly understood that EPA might make the "appropriate and necessary" determination *before* the results of the Mercury Study—including its consideration of costs—were available.[9]

Petitioners argue that unless the phrase "appropriate and necessary" includes consideration of cost, it lacks independent meaning. Not so. Congress required the Utility Study because it did not know whether power plant emissions of hazardous air pollutants would continue to cause significant health harms, notwithstanding implementation of the other programs included in the 1990 Amendments. It then told EPA to consider the results of the study and to act if those results made regulation "appropriate and

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[9] NMA contends that because the Mercury Study directed consideration of both "environmental effects" and costs, EPA erred in considering the former, but not the latter, in making the "appropriate and necessary" determination. NMA Br. 32-33. But the D.C. Circuit upheld EPA's conclusion that it could consider the environmental hazards posed by power plant emissions when deciding whether to regulate, Pet. App. 35a-37a, and that holding is outside the Question Presented. In any event, by requiring EPA to consider the results of the Utility Study, Congress did not preclude EPA from *also* taking into account other factors, such as environmental hazards. *See* 77 Fed. Reg. at 9325. Thus, while EPA could have chosen *not* to consider environmental effects—or *to* consider costs—the statute does not *require* either of those interpretations.

necessary." There is nothing mysterious (or superfluous) about that statutory standard when read in context.

Nor are Petitioners correct in contending that on EPA's view, "appropriate" and "necessary" are redundant. *E.g.*, Michigan Br. 34. Indeed, Petitioners can make that argument only by misrepresenting EPA's analysis. The Petitioner States argue that EPA "accounted for the *existence* of health hazards through its finding that regulation was 'necessary.'" *Id.* But as previously noted, EPA determined that regulation was "necessary" because "the hazards to public health" and the environment from power plant emissions "are reasonably anticipated to remain *after imposition of the requirements of the CAA*"—a factor that EPA's "appropriateness" determination did not consider. 77 Fed. Reg. at 9311 (emphasis added); *see id.* at 9363. Similarly, EPA's "appropriateness" analysis rested in part on the availability of control technology—a consideration not relevant to EPA's determination that regulation of power plants was "necessary." *Id.*

UARG further contends that EPA must consider costs in making the "appropriate and necessary" determination because "[c]onsideration of cost-benefit relationships is especially relevant for emission standards that address residual emissions and risks." UARG Br. 28. On UARG's view, because regulation under Section 112(n)(1)(A) addresses "smaller increments of emissions" that remain after the implementation of other provisions, consideration of costs is particularly "appropriate." *Id.*

UARG's argument fails because Section 112(n)(1)(A) is *not* a residual-risk provision. Emissions of hazardous air pollutants by power plants are not regulated by federal law outside of the Rule enacted pursuant to Section 112(n)(1)(A). Thus, Section 112(n)(1)(A) provides the *primary* method of regulating those emissions. Principles regarding "residual" risk are irrelevant.[10]

In fact, Section 112(n)(1)(A) contrasts sharply with the statute's actual residual-risk provisions, which address sources and emissions *already regulated* by Section 112. Section 112(f)(1) requires that EPA study the "risk to public health remaining, or likely to remain, from *sources subject to regulation under this section after the application of standards under subsection (d)*." §7412(f)(1)(A) (emphasis added). Thus, unlike Section 112(n)(1)(A), Section 112(f) focuses on sources that are *already* subject to regulation, and asks whether more must be done to reduce the risks from those sources.

Further, even in setting residual risk standards under Section 112(f)(2), Congress provided only that EPA promulgate standards if necessary either to provide an "ample margin of safety to protect public

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[10] Because Title IV's Acid Rain program does not target mercury and other hazardous air pollutants, NMA is wrong to contend that EPA's interpretation of Section 112(n)(1)(A) makes that provision the "tail that . . wag[s] the dog[]" of Title IV. NMA Br. 27-31. Regulation of hazardous air pollutant emissions by power plants under Section 112(n)(1)(A) is not the "tail" to Title IV's "dog"—it is a different animal altogether.

health," or "to prevent, taking into consideration costs ... and other relevant factors, an adverse environmental effect." §7412(f)(2)(A). EPA may not consider costs in making "an initial determination of what is 'safe,'" because cost has "no relevance" to that question. *Natural Resources Defense Council v. EPA*, 824 F.2d 1146, 1164-65 (D.C. Cir. 1987) (en banc) (addressing prior version of section 112(f)). Nothing in Congress's treatment of this residual risk scenario suggests that Congress intended to require EPA to consider costs under Section 112(n)(1)(A) before it imposed *any* emission standards. *See also* §7412(n)(2) (requiring a study and recommendations for "economically viable control technologies" to "reduce residual risks" from coke ovens "after implementation of the standard under subsection (d) of this section").

C. Deferring Consideration of Costs Until the Standard-Setting Phase Is Not Illogical.

Deciding whether to regulate based upon health and environmental hazards, and then considering cost when setting emission standards, makes practical sense. Merely deciding to regulate does not impose any costs in the abstract; costs result from the actual imposition of emission standards.[11] Those costs will vary

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[11] Section 112's judicial review mechanism underscores that EPA's decision to regulate power plants is merely a preliminary step that does not by itself affect substantive rights. The statute provides that listing decisions are not final agency action subject to review. §7412(e)(4). Instead, review may be had "when the Administrator issues emission standards" for a category of sources, *id.*—standards that will reflect cost considerations.

depending on what standards EPA promulgates. That decision, in turn, requires a detailed understanding of what emission reductions the best performers in the source category have already achieved, what equipment will be required to meet those limits, and what impacts on health and the environment will result. Yet Petitioners would require EPA to undertake those analyses before making the threshold determination whether power plant emissions of hazardous air pollutants should be regulated at all. Petitioners put the cart before the horse.

Petitioners nonetheless contend that EPA's choice not to consider costs at the first step of the analysis was unreasonable because "ignoring costs is an irrational way to regulate." Michigan Br. 30. That argument aims at a straw man. EPA did not ignore costs in promulgating the Rule; it accounted for them in numerous ways in deciding what emission standards to impose.

Most notably, the statutory method for setting emission standards considers costs both directly and indirectly. As noted above, Floor Standards generally are determined by taking the "average emission limitation achieved by the best performing 12 percent of the existing sources." §7412(d)(3)(A). Thus, minimum standards are based on what other, similar sources *already* have achieved in practice—a test that

necessarily ensures that standards will not impose industry-wrecking costs.[12]

To set standards more stringent than the Floor Standards, EPA must expressly "consider[] the cost of achieving such emission reduction." §7412(d)(2). Here, EPA generally decided not to impose standards more stringent than the Floor Standards. *See* 77 Fed. Reg. at 9367, 9369 (EPA adopted a standard more stringent than the Floor Standard for mercury from one subcategory of existing coal-fired plants, but this standard is less stringent than the mercury emission standard for all other existing coal-fired plants).

EPA also has numerous other ways to ensure that compliance is practicable, and it used many of them here.

For example, EPA permitted existing contiguous, commonly-controlled power plants in the same subcategory to demonstrate compliance with emission standards by averaging their emissions, rather than meeting the requirements on an individual basis. *See* 77 Fed. Reg. at 9384-85, 9473-76; Pet. App. 59a-64a (upholding EPA's use of averaging). As EPA

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[12] Petitioners at times argue that Section 112(d)(3) is entirely insensitive to costs. *See, e.g.*, NMA Br. 34-35. But if that were true, it would only highlight the irrationality of Petitioners' position. The D.C. Circuit found it "improbable" that Congress intended to force an "all-or-nothing" choice, *requiring* EPA to consider costs when making the on-or-off determination whether to regulate, but *prohibiting* EPA from considering costs as a basis for relaxing the Floor Standards. Pet. App. 29a.

explained, averaging "can provide sources the flexibility to comply in the least costly manner while still maintaining a regulation that is workable and enforceable." 77 Fed. Reg. at 9385.

EPA also controlled costs by establishing work practice standards, which are qualitative standards typically less costly to achieve and to monitor than numerical standards. *See* §7412(h)(1). In the Rule, EPA adopted several work practice standards "in lieu of numeric emission standards" for certain units and pollutants. 77 Fed. Reg. 9401; *see id.* at 9369, 9438.

In addition, to ease the costs of compliance, EPA adopted a three-year compliance period, the longest initial timeframe permitted by the statute. 77 Fed. Reg. at 9407-11; *see* §7412(i)(3)(A). EPA further suggested that "a fourth year for compliance" should be permitted "in a broad range of situations." 77 Fed. Reg. at 9407; *see id.* at 9410; JA876-77; §7412(i)(3)(B).

Given these other methods for accommodating costs, Petitioners are simply wrong to contend that EPA was "cost blind," *e.g.*, UARG Br. 24, or that EPA regulated with a "deliberate indifference to the regulation's cost," Michigan Br. 20. EPA's decision to regulate emissions of hazardous air pollutants by power plants using the same two-stage approach that Congress mandated for all other sources was entirely reasonable.[13]

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[13] Petitioners claim EPA's statutory construction could justify "regulations costing $1 trillion even if the benefit was a mere $1." NMA Br. 2. But the concern expressed in that hypothetical is

D. EPA's Approach Is Particularly Suitable Given the Highly Competitive Nature of Wholesale Electricity Markets.

EPA's regulatory approach—setting a regulatory floor based upon the emissions reductions that have already been demonstrated to be achievable by the best-performing plants in the source category—is particularly appropriate given the nature of competitive wholesale electricity markets. *See supra* at 7-11.

As previously explained, the wholesale electricity markets' use of an auction mechanism to determine which units are dispatched and what price they receive strongly disincentivizes investment and use of pollution control technology in the absence of regulation. Yet despite these market dynamics, EPA determined that, as of 2010, 69 existing coal-fired power plants—or 27 percent of those that reported data to EPA—already met all of the final existing source emission limits. 77 Fed. Reg. at 9387; JA875. Other data in the record indicate that substantially more units had already installed the necessary controls.[14]

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entirely fanciful, because EPA must find sufficient health harms for regulation to be "appropriate and necessary," and the features of Subsection (d), discussed *supra*, protect against over-regulation.

[14] Nearly 60 percent of all coal-fired boilers that submitted stack test data to EPA regarding mercury emissions were already meeting the mercury emissions standard. About 70 percent of all coal-fired boilers that submitted such data regarding particulate matter and acid gas emissions were already meeting the standards

That so many plants have installed the necessary controls—and have remained in business despite the cost advantage that polluting plants enjoy—completely undercuts the notion that the Rule will financially ruin the industry. To the contrary, the Rule simply requires that the remaining coal-fired plants meet the performance already achieved by many of their peers.[15]

Indeed, until now, these "dirty" units have benefited from a regulatory framework that has effectively subsidized power generation by high-polluting facilities. All else being equal, these plants have been able to underbid cleaner plants and thereby be called for dispatch more frequently than they otherwise would have been. Yet they still receive the

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governing one or both of those pollutants. JA627-29. EPA additionally noted that it "agree[d] with the findings of ... independent studies" that "over 50 percent of the fleet is equipped with scrubbers and the number will increase to nearly 2/3 by 2015." 77 Fed. Reg. at 9417. As noted above, operating a scrubber will typically allow a coal-fired plant to satisfy the emissions standards for acid gases. 76 Fed. Reg. at 25,023, 25,038-40.

[15] NMA argues that "to the extent" Floor Standards "implicitly consider[]" cost, "it cannot be assumed that all units ... can bear the cost of new controls simply because" the best-performing units have done so. NMA Br. 34 n.16. But nothing in the Clean Air Act—or in administrative law more generally—requires EPA to set emission standards that are economically practicable for each and every source in the category. *Cf. EPA v. Nat'l Crushed Stone Ass'n*, 449 U.S. 64, 73-78 (1980) (rejecting argument that EPA must provide "variances from otherwise valid regulations where dischargers cannot afford normal costs of compliance" because such variances "would undermine" Clean Water Act's purpose of "reduc[ing] the total pollution produced by an industry").

market-clearing price set by the highest-priced power generator needed to meet demand. By requiring all plants to meet minimum emission standards demonstrated to be achievable by peers that have remained competitive, the Rule levels the playing field and eliminates the perverse incentives that previously allowed coal-fired plants to profit by refusing to install the same emissions controls used by their peers.

To be sure, some coal-fired plants may choose to retire rather than make the capital expenditures required to comply with the Rule. But the plants most likely to retire are very old—between 40 and 60 years—and nearing the end of their useful lives in any event. JA546, JA579-80; *see also* EPA, Regulatory Impact Analysis for the Final Mercury and Air Toxics Standards 3-17 (Dec. 2011), http://www.epa.gov/ttnecas1/regdata/RIAs/matsriafinal.pdf (average retired plant expected to be 52 years old). Moreover, these plants face other economic pressures much more significant than this rulemaking in determining whether they retire. Most important is the declining price of natural gas, which has allowed natural gas plants to submit lower bids for dispatch. *See* 77 Fed. Reg. at 9407. This has resulted in lower electricity prices and less frequent dispatch for coal plants, with the result that coal plants on balance have greater difficulty covering their costs.

EPA carefully considered whether the Rule would adversely affect electric reliability, and, based on abundant record evidence, concluded that it would not. Using modeling that "has been extensively reviewed

and has been utilized in several rulemakings affecting the power generation sector over the last 15 years," 77 Fed. Reg. at 9413, EPA predicted that only 4.7 gigawatts of coal-fired plants would retire as a result of the Rule, as opposed to other factors such as lower natural gas prices and greater energy efficiency. *Id.*; *id.* at 9407. The 4.7 gigawatts of expected retirements amount to less than one-half of one percent of total generating capacity in the United States, and less than 1.5% of total U.S. coal capacity. *Id.* at 9407-08.

Petitioners nonetheless suggest that the Rule "is forcing numerous plants into retirement" and will "contribute" to the retirement of 54 gigawatts of coal-fired generation capacity. NMA Br. 27; UARG Br. 20-21. Yet in the Court of Appeals, "Petitioners [did] not challenge [EPA's] conclusion" that the Rule would cause the early retirement of less than 2 percent of U.S. coal-fired capacity. Pet. App. 32a; 77 Fed. Reg. at 9416; *see id.* at 9408. They therefore cannot do so here. *E.g.*, *Glover v. United States*, 531 U.S. 198, 205 (2001). And even if they could, in considering EPA's predictive judgment about the effects of the Rule—a technical judgment within its area of expertise—this Court's review would be "at its most deferential." *Baltimore Gas & Elec. Co. v. Natural Resources Defense Council, Inc.*, 462 U.S. 87, 103 (1983). That deference would be well-warranted: the report on which Petitioners principally rely, *see* UARG Br. 21 n.8; NMA Br. 15, confirms that greater numbers of coal plant retirements are expected because those plants have been "under significant economic pressure in recent

years because of low natural gas prices and slow electricity demand growth."[16]

The limited retirements anticipated to result from the Rule will leave grid operators with substantial capacity reserve margins, particularly after accounting for anticipated new investments in electrical generation. The industry has anticipated the Rule for many years, and participants have made numerous investments that will result in a more modern and environmentally friendly fleet. Some retiring coal plants will be re-powered as natural gas-fired plants.[17] For example, after acquiring in 2010 two primarily coal-fired plants in New Jersey and Delaware representing approximately 780 megawatts of capacity, Calpine redeployed them to operate primarily on gas. Exelon has invested billions of dollars in installing emissions controls on coal plants and in operating low- and zero-emission generation such as nuclear plants. Similarly, PSEG has spent more than a billion dollars installing pollution control technologies on its coal plants. There

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[16] U.S. Energy Information Administration, Today in Energy, *AEO2014 Projects More Coal-Fired Power Plant Retirements by 2016 Than Have Been Scheduled* (Feb. 14, 2014), *available at* http://www.eia.gov/todayinenergy/detail.cfm?id=15031.

[17] As of October 2014, nearly 11 gigawatts of coal-to-gas-conversions had been announced or were under construction, more than twice the 4.7 gigawatts EPA projected to retire due to the Rule. Michael Niven & Neil Powell, *Coal unit retirements, conversions continue to sweep through power sector*, SNL Financial (Oct. 14, 2014), http://www.snl.com/InteractiveX/Article.aspx?cdid=A-29431641-13357.

also has been phenomenal growth in the number of new natural gas-fired plants. Between 1999 and 2008, the electric sector added almost 270 gigawatts of natural gas-fired generating capacity. JA558. Moreover, gas-fired plants still have relatively low utilization rates compared to coal plants because for many years, coal has been cheaper than gas, *see, e.g.*, JA564-66, meaning that significant quantities of generation could be switched from coal-fired plants to gas-fired plants without any adverse consequences for electric reliability.

In sum, the record amply supports EPA's conclusion that the Rule is economically practicable, and will have no adverse impact on electric reliability.

II. Even If the Court Determines That EPA Should Have Considered Costs in Deciding to Regulate, the Court Should Affirm Because EPA Determined That Benefits Massively Exceed Costs.

Even assuming EPA was required to consider costs when determining whether to regulate hazardous air pollutant emissions by power plants, the Rule should still be affirmed. Under Subsection 112(e)(4), a listing decision is not itself final agency action that should be reviewed in isolation; instead, the decision to regulate may be reviewed only "when the Administrator issues emission standards for such pollutant or category," §7412(e)(4), at which time the costs and benefits of the action will be known.

Here, EPA determined that the Rule's benefits massively exceed its cost: the Rule's "annual quantified net benefits (the difference between benefits and costs) are $27 to $80 billion using a 3 percent discount rate or $24 to $71 billion using a 7 percent discount rate." 77 Fed. Reg. at 9306. In addition, EPA identified many non-monetized benefits, including various health and ecosystem effects. *Id.* Because EPA has already determined that the benefits of regulating power plants exceed the costs, a remand would serve only to further delay regulation that is already many years overdue and to harm industry participants that have already invested in pollution reduction.

A. Petitioners Misrepresent EPA's Cost-Benefit Findings.

Petitioners repeatedly claim that "the quantified costs of hazardous air pollutant regulation are more than one-thousand times greater than the quantified benefits: $9.6 billion versus $4 million to $6 million." UARG Br. 3; *see also id.* at 19, 23; Michigan Br. 13, 32, 47; NMA Br. 1, 2, 14, 19, 25. This constant refrain flatly misrepresents the record. As a matter of fact—made clear in black and white on the Rule's opening pages—EPA found that the benefits outweigh the costs by a ratio of at least 3:1, and as much as 9:1. 77 Fed. Reg. at 9306. Moreover, EPA explained that many of the benefits of reducing hazardous air pollutants cannot easily be quantified, and thus are not accounted for by these already lopsided ratios. *See id.* (EPA "could not monetize some costs and important benefits, such as some [mercury] benefits" and those for other hazardous

air pollutants, but "[u]pon considering these limitations and uncertainties, it remains clear that the benefits of this rule ... are substantial and far outweigh the costs."). Thus, contrary to Petitioners' efforts to obfuscate, this is simply not a case where EPA has required plants to "spend billions to save one more fish or plankton." *Entergy*, 556 U.S. at 232-33 (Breyer, J., concurring) (quotation marks omitted).

To be sure, most of the quantified benefits identified by EPA are "co-benefits"—that is, benefits resulting from the Rule that do not arise exclusively from reducing emissions of hazardous air pollutants. Petitioners simply pretend that these co-benefits do not exist. But they are real benefits from the Rule and cannot be ignored when weighing its benefits against its costs—just as ancillary or indirect costs cannot be ignored, either.

Indeed, the many benefits of regulating hazardous air pollutants are inextricably connected with the benefits of regulating certain "conventional" pollutants. For example, some fine particulate matter consists in part of non-mercury metals. Thus, controlling emissions of non-mercury metals can also reduce emissions of particulate matter, and vice-versa. 77 Fed. Reg. at 9420; 76 Fed. Reg. at 25,038-40; JA105-06; JA110; Utility Study at 2-10, 2-13, 13-22. Similarly, limiting hazardous acid gas emissions may also limit SO_2 emissions. 76 Fed. Reg. at 25,038-40, 25,050-51.

Petitioners provide no rationale or authority for ignoring such co-benefits when conducting a cost-

benefit analysis. In fact, EPA's consideration of co-benefits, as well as ancillary costs, was entirely proper and consistent with established Office of Management and Budget ("OMB") directives and peer-reviewed EPA guidance. The relevant OMB directive, promulgated in 2003, explains that an agency's

> analysis should look beyond the direct benefits and direct costs of [its] rulemaking and consider any important ancillary benefits and countervailing risks. An ancillary benefit is a favorable impact of the rule that is typically unrelated or secondary to the statutory purpose of the rulemaking (*e.g.*, reduced refinery emissions due to more stringent fuel economy standards for light trucks) while a countervailing risk is an adverse economic, health, safety, or environmental consequence that occurs due to a rule and that is not already accounted for in the direct cost of the rule (*e.g.*, adverse safety impacts from more stringent fuel-economy standards for light trucks).

OMB, Circular A-4 at 26 (Sept. 17, 2003). EPA's internal guidelines likewise make clear that "[a]n economic analysis of regulatory or policy options should present *all* identifiable costs and benefits that are incremental to the regulation or policy under consideration. These should include directly intended effects and associated costs, as well as ancillary (or co-) benefits and costs." EPA, *Guidelines for Preparing Economic Analyses* at 11-2 (Dec. 17, 2010) (updated May 2014) (emphasis added). Thus, contrary to

Petitioners' insinuations, there was nothing aberrational or irregular about EPA's consideration of co-benefits when weighing the benefits of the Rule against its costs.

Petitioners do not challenge as arbitrary and capricious the basic principle that an agency, when weighing costs and benefits, should consider *all* the costs and benefits of regulatory action. The notion that the agency should count only some benefits, and presumably only some costs, would have far-reaching consequences and would be contrary to well-established economic principles[18] and case law. *See, e.g., Competitive Enter. Inst. v. NHTSA*, 956 F.2d 321, 327 (D.C. Cir. 1992) (reversing agency for failing to consider whether benefits of fuel economy standards outweigh ancillary costs in terms of lives lost due to smaller vehicles); *Ctr. for Biological Diversity v. NHTSA*, 538 F.3d 1172, 1198-1203 (9th Cir. 2008) (reversing agency for quantifying ancillary costs of fuel economy standards (the impact on vehicle sales and employment) but not quantifying ancillary environmental benefits).

Petitioners also do not dispute that EPA faithfully implemented the applicable OMB and internal agency guidance regarding how to conduct cost-benefit analysis. Indeed, as EPA acknowledged, studies submitted by commenters, including Exelon, suggested that EPA's estimate of benefits was, if anything,

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[18] *See, e.g.*, E.J. Mishan & Euston Quah, *Cost Benefit Analysis* 4-7, 104 (5th ed. 2007).

conservative. 77 Fed. Reg. at 9415; JA689.[19] EPA also considered comments that the Rule would result in indirect economic costs due to reduced employment and higher electricity prices, but it found that any job losses were likely to be more than offset by increased employment in "manufacturing steel, cement and other materials needed to build pollution control equipment," as well as "jobs creating and assembling pollution control equipment, and jobs installing the equipment at power plants." 77 Fed. Reg. at 9414. EPA further noted "[p]otential job increases from increased output by lower-emitting facilities." *Id.* As for electricity prices, EPA found that prices are likely to increase only around 3 percent, and "the downstream economic effects" of any such increase is likely "to be small because electricity is only a small factor in the production of most goods and services." *Id.*

Petitioners do not challenge these findings as unsupported by substantial evidence. Instead, they simply ignore the findings that EPA actually made, claiming that they are irrelevant because EPA stated that it did not rely on these co-benefits in deciding that regulation was "appropriate and necessary." NMA Br. 17, 41-42; Michigan Br. 47-48. Of course EPA did not consider these co-benefits when deciding whether to

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[19] In a peer review of EPA's analysis for the proposed rule, Dr. Charles Cicchetti, an economist, concluded that if one were to consider benefits that EPA had not attempted to monetize as well as positive impacts on the Nation's economy, the Rule would create $52.5 to $139.5 billion in annual net benefits. JA691; 77 Fed. Reg. at 9415.

regulate. That is because, under EPA's view of the statute, the decision whether to regulate should turn on whether hazardous air pollutant emissions from power plants were causing public health and environmental harms. EPA concluded that they were, and had no cause to inquire further at that stage. But if Section 112(n)(1)(A) *had* required a cost-benefit analysis as a predicate to the decision to regulate power plants, then it would have been irrational for EPA to consider only *some* of the benefits of regulation—just as it would have been irrational for EPA to consider only *some* of the costs. Thus, there is no basis for Petitioners to treat tens of billions of dollars of co-benefits resulting from the Rule as though they do not exist.

B. The Rule Should Be Sustained Because EPA Has Determined That Its Benefits Exceed Its Costs.

1. A Remand Would Be Pointless, But Would Inflict Further Competitive Harm on Generators That Have Already Invested in Pollution Control.

In light of EPA's actual finding that the benefits of the Rule significantly exceed its costs, this Court should affirm the Rule even if it determines that EPA should have considered costs when deciding whether regulation was "appropriate."

A remand for EPA to make the very cost-benefit determination that it already has made in the Rule would be "an idle and useless formality." *Morgan Stanley Capital Grp. Inc. v. Public Util. Dist. No. 1*,

554 U.S. 527, 545 (2008) (*quoting NLRB v. Wyman-Gordon Co.*, 394 U.S. 759, 766-67 n.6 (1969) (plurality op.)). EPA received voluminous comments regarding its proposed cost-benefit analysis, and it considered and responded to them. 77 Fed. Reg. at 9313-19, 9413-19, 9424-39; *e.g.*, JA885-903. EPA not only found that the benefits justified the costs, *see supra*, but it *needed* to so find in order to promulgate the Final Rule. Under Executive Order 13563, an agency may "propose or adopt a regulation *only* upon a reasoned determination that its benefits justify its costs." 76 Fed. Reg. 3821, 3821 (Jan. 18, 2011) (emphasis added).

Affirming the Rule on the basis of EPA's cost-benefit analysis, rather than remanding, would be consistent with *SEC v. Chenery Corp.*, 318 U.S. 80 (1943). There, the Court explained that the principles governing judicial review of administrative agency decisions are akin to those governing judicial review of jury verdicts. Although a reviewing court is not permitted to substitute its own policy judgments or factual findings for the agency's, it need not remand a case to an agency merely to reinstate a factual finding that the agency has already made. Instead, the agency's decision—like a decision of a lower court or a jury—"must be affirmed if the result is correct 'although the lower court relied upon a wrong ground or gave a wrong reason.'" *Id.* at 88 (quoting *Helvering v. Gowran*, 302 U.S. 238, 245 (1937)). In short, "*Chenery* does not require that we convert judicial review of agency action into a ping-pong game." *NLRB v. Wyman-Gordon Co.*, 394 U.S. 759, 766-67 n.6 (1969) (plurality op.).

Given the administrative record before the Court, "[t]here is not the slightest uncertainty as to the outcome" of any further cost consideration this Court might direct EPA to undertake. *Id.* It would therefore "be meaningless to remand." *Id.* In fact, a remand would accomplish nothing but further delay, frustrating Congress's purpose to expedite regulation of hazardous air pollutant emissions. That delay also would perpetuate the distortion of wholesale electric markets to favor dirtier plants at the expense of cleaner ones. And it would chill the industry from making further investments that will modernize America's generation fleet and expand the natural gas pipeline infrastructure, as companies are reluctant to build replacement, cleaner generation or to modernize existing plants when their competitors are not required to comply with modern emission standards. *See* JA425-27.

2. NMA's Argument That EPA Must Separately Evaluate the Costs and Benefits of Regulating Each Hazardous Air Pollutant Is Contrary to Statutory Text.

Finally, NMA contends not only that EPA was required to consider costs and benefits, but that it needed to separately evaluate those costs and benefits for each pollutant, and failed to do so for acid gases. NMA Br. 38-39 (arguing that EPA failed to identify health hazards or environmental impacts from acid gas emissions). Even were this Court to hold that EPA should have considered cost in making the "appropriate

and necessary" determination, NMA's argument would provide no basis for a remand.

NMA's contention, which was unanimously rejected by the D.C. Circuit, falls outside this Court's grant of certiorari. It also is contradicted by the record. EPA noted the significant health benefits produced by control of acid gases. 76 Fed Reg. at 25,050-51. Moreover, as NMA grudgingly acknowledges, EPA relied upon a study of hydrochloric acid deposition in the United Kingdom, which showed that hydrochloric acid can be a significant driver of acidification. 77 Fed. Reg. at 9362; NMA Br. 39. NMA asserts that this study is somehow irrelevant because it was conducted in the United Kingdom, and that EPA could not identify an example in which "domestic electric generator hydrochloric acid emissions have affected acid deposition." NMA Br. 39. NMA provides no reason to believe that the laws of chemistry and atmospheric science are any different in the United Kingdom than in the United States, and EPA was plainly within its discretion to credit that study.

In any event, the statute squarely forecloses NMA's notion that EPA must separately make an "appropriate and necessary" finding for each individual pollutant. *Cf.* NMA Br. 42-44. Section 112 regulates *sources*, and, for covered sources, requires that emission standards be established for the pollutants listed in Subsection (b). §7412(b). Thus, Section 112(n)(1)(A) states that EPA "shall regulate *electric utility steam generating units* under this section" if it finds such regulation

"appropriate and necessary." §7412(n)(1)(A) (emphasis added).

"[T]his section," *id.*, in turn, requires that EPA "promulgate regulations establishing *emission standards for each category or subcategory of major sources and area sources*" of the pollutants that Congress has listed. §7412(d)(1) (emphasis added). While the statute goes on to give EPA discretion to "distinguish among classes, types, and sizes of sources within a category or subcategory in establishing such standards," *id.*, it never suggests that EPA must, or even may, distinguish among pollutants, and set emission standards for some pollutants but not for others.

The legislative history confirms that Congress intended for EPA to promulgate, for covered sources, emission standards for *all* pollutants listed in Subsection (b). Congress amended Section 112 in 1990 in part because EPA had failed to regulate enough pollutants under the prior provisions. The Senate Report, for example, explained that "[i]n 18 years, EPA has regulated only some sources of only seven chemicals .... The legislation reported by the Committee would entirely restructure the existing law, so that toxics might be adequately regulated by the Federal Government." S. Rep. No. 101-228, at 128, *reprinted in* 1990 U.S.C.C.A.N. at 3513. Congress therefore added the specific list of pollutants for which, for each covered source, emission standards must be set. In sum, the D.C. Circuit correctly and unanimously rejected "[t]he notion that EPA must 'pick and choose'

among [pollutants] in order to regulate only those substances it deems most harmful." Pet. App. 42a; *see Nat'l Lime Ass'n v. EPA*, 233 F.3d 625, 633-34 (D.C. Cir. 2000).

CONCLUSION

For the foregoing reasons, the decision below should be affirmed.

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Respectfully submitted,

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